

thickness being equal to at least two times the average spacing;

the conductors forming a fringing field capacitance that changes in response to changes in the level of the fluid;

at least two of the conductors driven by an alternating current electrical signal, the value of the fringing field capacitance indicative of the level of the fluid.

In the Abstract of the Disclosure

In light of the rejection of the claims by the examiner, and the above amendments to the claims, Applicant has revised the Abstract of the Disclosure accordingly, to provide greater clarity. The detail of deletions and additions can be seen in Appendix B.

The Abstract of the Disclosure is amended to read as follows:

A capacitive fluid level sensor is disclosed that operates without the use of a float, wherein co-planar sensing electrodes disposed onto a dielectric substrate and positioned proximate a dielectric wall of a vessel containing a fluid, form a fringing field capacitance that changes in accordance with changes in the level of the fluid. The electrodes are electrically insulated from the measured fluid. The electrodes are sized and spaced to maximize response of the capacitance to changes in the level of the fluid, while minimizing the effects of the dielectric wall. The sensor is fabricated such that it can be positioned against the outside of a dielectric wall of a vessel, or embedded within a dielectric material. A low permittivity spacer and shield assembly are taught which reduce sensitivity to electric fields external to the vessel. An interdigital comb configuration of the electrodes is also disclosed in which gaps or depressions are formed into the dielectric substrate in an area of spacing of the electrodes.

Remarks

1. In the detailed description of figure 8, on page 12, "Spacing 15" has been amended to "Spacing 16". The informality cited by the examiner should now be appropriately corrected.